## ABSTRACT OF THE DISCLOSURE

An automatic injection device has piston holders holding cylinder pistons and plural systems of heads having a drive mechanism for moving the piston holders forward and backward so that the device can hold a plurality of syringes and operates injection or suction in each syringe independently. This device also has a mechanism for prohibiting the backward-moving of the piston holder of a second head when the piston holder of a first head is in a forward-moving state and the piston holder of the second head is in a stopped state. This structure effectively prevents liquid from being undesirably mixed and the injection amount thereof from becoming less accurate.